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A STUDY OF PERCEPTION OF INTERNATIONAL STUDENTS ON QUALITY OF MALAYSIAN CARS

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Abstract

This paper examines how international students in a local public institution perceived the quality of Malaysian-made cars and whether the country of origin is an important factor in determining the purchase decision of a car. A total of 176 full-time registered international students from 12 countries participated as respondents in this research. A purposive sample was used in this research whereby respondents were asked to complete a self-administrated questionnaire. The findings supported the literature which indicated that most respondents have a more favourable perception of cars made in the developed countries than cars made in developing countries. The influence of country of origin, also known as the "made in" effect, has been broadly defined as the positive or negative influence that a country's product of manufacture may have on consumers' decision processes or subsequent behaviour. The result of this research showed that the effect of country of origin is discernable among the respondents.

Keywords*: Perception, quality of cars, international students, "made in" effect.*

Introduction

Malaysia targeted year 2020 as the year when it shall achieve the status of developed nation. By then, Malaysia's economy will no longer be dependent on being a major exporter of raw commodities such as rubber, palm oil, tin, and even petroleum. It is the country's desire to have a strong and viable domestic economy whilst at the same time being a major exporter of finished goods and services which have high added value. One such product sector which the Malaysian government wants to further develop and expand is the Malaysian automobile sector. The Malaysian national car projects which consist of PROTON and PERODUA, are still being given much protection by the Malaysian Government. It is the aim of the Malaysian Government that the two Malaysian automobile brands, will be able to stand on their own feet and compete favourably in the global automobile market.

With the ongoing trade liberalisation and globalisation of markets, advances in Internet communications and transportation technologies, Malaysian products are found in many countries all over the world. Malaysian automobile production companies are striving to carve its niche in the world market and become a global brand. It is imperative for consumers overseas to accept and have good perception of Malaysian products for the products to be accepted globally. A study to examine the perception of foreign students towards Malaysian made products relative to other countries is important to discover how foreign students perceive Malaysian products. This can also help in developing a strategic plan for the future growth of products

so that Malaysia can be aware of where she stands compared to overseas competitors.

Therefore, this study was conducted with two objectives. Firstly, it aimed to investigate the perception of country of origin (COO) influence on Malaysian products. Secondly, it examined how foreign students perceived quality of Malaysian cars compared to other countries. The study contributed to theory in the sense that it examined how the COO theory influenced the purchasing decision of Malaysian products. COO was defined as the origin of the brand where the product is perceived to originate from (Thakor & Kohli, 1996). Besides, this study helped managers to practically understand how international or foreign students perceived Malaysian-made cars in terms of quality, performance, and delivery. In this study perception of products was defined as the apprehension, conception or conscious discernment of the foreign or international students on Malaysian products (Thakor & Kohli, 1996). Meanwhile quality was defined in terms of performance, reliability and durability of a product (Gale & Buzzell, 1989).

Past studies on cars used price-linked perceived quality to brand equity or reputation of a brand while others linked it with increased market price (McCarthy & Patrick, 2001). McCarthy's study not only explained demand with physical characteristics and price, but also showed a preference for foreign brands among respondents. He found that the demand for Asian vehicles, like cars, is price inelastic and young consumers have less demand for domestic cars. Sedgwick (2002) supported this finding and found that imported cars were more preferred to domestic cars. Kinter (1995) suggested in his research that race has an influence on brand preference.

Earlier research by Wetzel and Hoffer (1982) concluded that quality explains why sales and market share of foreign brands have been increasing. Other articles (Buzzell, 2004) supported the idea that there is a correlation between quality and market share on profitability. The research indicated that if car manufacturers are concerned with profit, they must make quality products. Gale and Buzzell (1989) indicated that perceived quality can be as important as actual quality in buying decision. Perceived quality does not necessarily mean the product is actually better or worse, but whether the customer thinks the product is better or worse. Aaker (1996) argued that perceived quality is a necessary component of an effective brand strategy. LaBarre (1994) found in her research that Japanese products have an excellent good perceived quality rating around the world.

Methodology

This was a quantitative study which attempted to examine how Malaysian products, like cars, stand in relation to quality, performance and reliability compared to other countries. This was a field of study where all variables were not manipulated, thus no artificial setting was created. Data collected for the sample of this study consisted of 176 international students who are studying in Universiti Utara Malaysia (UUM). The sampling population was derived from full-time international students who had registered with the Registrar of UUM.

A purposive sampling (Sekaran & Bouyie, 2003) was used in this study. This was because students who were chosen have to fulfill certain requirements before they can be accepted as respondents. There were two requirements for the respondents. Firstly, they must be a full-time registered student with the Registrar of UUM. Secondly, they must be international students in UUM. This was a cross-sectional study (Sekaran & Bouyie, 2003) where data was collected over a period of several month. In this study, data was gathered from December 2011 to March 2012, using a self-administered questionnaire. The questionnaire which was employed by Darling and Wood (1990), was replicated and divided into two sections, namely, Section A and Section B. Section A of the questionnaire dealt with the country of origin statements in general while Section B attempted to capture the respondent's perception of countries with the highest quality products by asking them to rank ten countries

in a descending order. Section B was adopted from Ghazali, Othman, Yahya, and Ibrahim (2008). Statistical Package for Social Sciences (SPSS) version 19.0 was used to analyse the data collected for this study. For data processing, six statistical techniques were used for different purposes. These included descriptive statistics, mean, median, and standard deviation. As for inferential statistics, cross tab results were obtained and T-test and ANOVA were conducted.

Findings

There were 176 respondents who were undergraduate and postgraduate students (registered UUM international students) from the College of Business (COB) and College of Law and Government and International Studies (COLGIS). There were 129 male respondents (73.4%) and 47 female respondents (26.4%). Most of the respondents were within the age range of 20–24 years old (52.8%). Other respondents were of age 25–29 years old (42%), 30–34 years old (2.8%), 35–39 years old (2.3%) and 0.6% over 40 years old. Apart from that, there were 29.9% international students from Africa, and 28.2% students from the ASEAN countries. There were 27.7% students from China and 13.6% students from the Middle East.

Table 1

Programme of Studies of Respondents

Programme	Total
BBA	41
B. Marketing	8
BIBM	18
B. Banking	7
B. Economy	3
BIT	14
Postgraduates	85
Total	176

The study programmes of respondents were Bachelor of Business Administration (BBA) (24.3%), followed by Bachelor of International Business Management Studies (10.2%), Bachelor of Marketing (4.5%), Bachelor of Banking (4.5%), and postgraduates with 46.3%.

The following results were obtained from the questionnaires distributed to the respondents to gauge their perceptions on the importance of country of origin when purchasing locally made products.

Table 2

Descriptive Statistics

	N	Mean	Std. Deviation
When buying expensive items such as car, TV or refrigerator, I always seek to find out what country the product was made in.	177	3.73	0.996
I feel that it is important to look for a country of origin information when deciding which product to buy.	177	3.66	0.928
To make sure that I buy the highest quality product or brand, I look to see what country the product was made in.	174	3.76	0.973
If I have little experience with a product, I search for country of origin information about the product to help me make a more informed decision.	176	3.56	0.978

(Continued)

	N	Mean	Std. Deviation
I refuse to purchase a product without knowing its country of origin.	175	3.22	1.089
When purchasing a product, I believe country of origin will determine the technological sophistication of the product.	175	3.59	1.018
When I am buying a product, the country of origin is the first piece of information that I will consider.	172	3.37	1.098
A product's country of origin does not determine the quality of the product.	175	3.22	1.193
When buying a product that has a high risk of malfunction, for example a digital camera, a person should always look for the country of origin.	173	3.52	0.998
It is less important to look for country of origin when buying a product that is less expensive such as a shirt.	174	3.45	1.018
Seeking country of origin information is less important for inexpensive goods than for expensive goods.	172	3.41	1.036
I find out a product's country of origin to determine the quality of a product.	174	3.47	0.960
To purchase a product that is acceptable to my family and my friends, I look for the product's country of origin.	176	3.49	0.980
I look for country of origin information to choose the best product available in a product class.	176	3.55	1.024

Table 2 indicates that the overall mean of the questions is above "3" (from Likert scale of 1 to 5). The statement "To make sure that I buy the highest quality or brand I look forward to seeing what country the product was "made in" scored the highest in terms of mean (3.76), followed by the statement "When buying an expensive item, such as car, TV or refrigerator, I always seek to find out what country the product was "made in" (3.73).

Table 3

Descriptive Statistics (*Mean and Standard Deviation*)

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Perception	176	1.18	4.90	3.5394	0.59066	0.349
Valid N (listwise)	176					

According to Table 3, the respondents indicated strong agreement with the importance of finding out which country produced the product when buying a quality product (3.76), expensive product (3.73), and technologically sophisticated product (3.59), high risk of malfunction product (3.52), and when choosing the best product available in a product class. The results indicated that the influence of COO remains highly relevant and is still important in pre-purchasing decision.

Three different statistical tests were carried out in investigating the perception of international

students toward the importance of COO in pre-purchasing decision-making. Firstly, t-test was conducted to investigate and identify the difference in perception of international students of COO in purchasing decision-making based on gender. Then, ANOVA was conducted based on three aspects, namely study programme, region, and year of graduation. Lastly, the third task was to determine the ranking by countries in terms of the quality of cars.

A t-test was conducted to identify the difference in gender in the perception of international students of COO in pre-purchasing decision-making.

Table 4

T-test (Gender)

		Levene's Test for Equality of Variances		T-test for Equality of Means		
		F	Sig.	T	df	Sig (2 tail)
Perception	Equal variances assumed	0.326	0.569	2.339	176	0.020
	Equal variances not assumed			2.239	73.240	

Table 4 shows that the result of the t-test was significant at $p = 0.020$ ($p < 0.05$), which indicates that there is a difference between male and female in their perception on the importance of COO in purchasing locally made products.

A one-way ANOVA was conducted to examine if there was any difference between groups of students according to (a) study programme and (b) region.

(a) Study Programme

Table 5

ANOVA (Different Program of Studies)

	Sum of squares	df	Mean square	F	Sig
Between groups	0.521	6	0.087	0.266	0.952
Within groups	55.283	169	0.327		
Total	55.805	175			

The results from Table 5 is not significant at $p = 0.952$ ($p < 0.05$), hence there is no significant difference between the programme of study in the perception of international students on the importance of COO in pre-purchasing of Malaysian products.

(b) Region

Table 6

ANOVA (Region)

	Sum of squares	df	Mean square	F	Sig
Between Groups	5.043	4	1.26	4.252	0.003
Within Groups	50.700	171	0.296		
Total	55.743	175			

The results from Table 6 is significant at $p = 0.003$ ($p < 0.05$), hence there is a significant difference between the region in the perception of international students on the importance of COO in purchasing Malaysian products.

The following ranking was carried out to determine the countries that would be ranked from first to last in terms of the quality of their products based on the perception of the respondents to identify the best quality cars based on their COO.

Table 7

Ranking of Quality of Cars by Country of Origin by Respondents

Country/ Ranking by Number of Count / Preference by Respondents	Japan	Germany	USA	UK	South Korea	Malaysia	Taiwan	China	India	Thailand
First	40	21	29	4	2	2		12		
Second	30	24	24	16	3	3	6	8	3	6
Third	20	20	29	24	9	4	1	6	1	1
Fourth	11	21	13	38	13	8	3	6	4	3
Fifth	3	11	6	13	39	14	14	7	6	4
Sixth	2	6	3	9	23	10	23	20	9	11
Seventh	4	4	4	5	9	17	31	20	14	10
Eighth	5	4	3	4	9	25	17	19	23	9
Ninth	1	3	5	1	9	21	13	6	30	28
Tenth	2	3	1	3	1	13	9	13	27	45

From the Table 7, it was found that most of the respondents ranked Japan as first and second choice, this was followed by the USA, Germany, UK, and South Korea. Malaysia was ranked as number 8 in terms of perceived quality of car made. In conclusion, developed countries such as Japan, USA, Germany, and UK are respondents' main choice with the perception that they produce better quality cars. According to this result, South Korea is the only Asian country (other than Japan) which was selected as the fifth according to the Country of Origin (COO). Thailand was ranked 10th place after India.

Discussion

In this study, it was found that most respondents agreed strongly that it is important to identify the country of origin before the pre-purchasing decision, especially in buying high-range price and sophisticated products, like cars. Further statistical tests showed that there was a significant difference in perception of international students by region, but there was no significant difference in terms of age and gender among the respondents. These findings supported earlier literature which indicated that the concept of COO is still relevant in influencing the consumers' evaluation of products (Morello, 1984; Pappu Quester et al., 2007).

COO influence theory is often used by consumers to predict quality and performance of the products and in understanding pre-purchasing decisions (Cai, Cude, & Swagler, 2004; Khachatuarian & Morganosky, 1990). Research by Terpstra and Sarathy (2000) also discovered that consumers from the same nation may have a similar stereotyping tendency in perception of different country products, and hence consistent with this, the research found significant differences between respondents of different regions in the perception of the importance of COO.

This study's results were also consistent with the findings of Han (1990) and Schooler (1971), who discovered a positive relationship between a country's level of economic development and the evaluation of its product. In other words, the more developed the economy of a country, the higher the respondents will perceive the quality of their cars.

The second objective of the research was to examine how Malaysian made cars ranked compared to nine other countries namely United States, United Kingdom, Germany, South Korea, India, Thailand, Japan, Taiwan, and China. The respondents for this study were from mainly ASEAN, Middle East and African countries. There were almost 100 students (49 Chinese and 48 from ASEAN countries) who participated in this research, with a ratio of 70:30 of males to females. Somehow, the respondents did not choose their own country like China or Thailand as the countries which produced the best-quality cars as there might be a tendency for respondents to be country-bias toward the products made in their own country. The findings, therefore, indicated that the respondents were honest in answering the questionnaire.

The findings also supported Kaynak and Cavusgil (1983) who found that when superior foreign products are available, consumers may not accept inferior quality products even if these are their own country or domestic products. Therefore, we disagreed with the argument by Han (1988) that the consumer tender to be more patriotic when they are choosing between products made in their own countries, like television or automobile. This was proven from the study, where, although there were 97 out of 176 students from ASEAN countries such as Thailand, it was found that there were no own country bias as cars from Thailand did not achieve high ranking (10th place) among the 10 countries since Thailand was ranked by the respondents to have the least received quality in terms of cars.

Apart from that, this study supported the findings of Papadopolous (1991) which found four dimensions that governed the consumer in evaluation of products from various countries of origin, namely, product quality, price, value, and market presence. There was an additional

perception that respondents who favoured industrial development of a country often have consumer preferences for foreign over domestic products. This study was also consistent with the study by Shimp and Sharma (1993) that found pricing and product quality were the two most salient dimensions evoked by consumers when thinking about imported product quality, such as cars.

Japan, United States, and United Kingdom emerged as the top three in the ranking of most quality made cars. Hence can be concurred that the research supported the findings by Van Gelder (2003), where the majority of the respondents agreed that products made in advanced or developed countries have better quality as compared to the products made in emerging or developing countries.

This research contributed to the understanding of on-going theory building, especially with regard to establishing the importance of perception of COO to the pre-purchasing behaviour of international young consumers. In addition, this study indicated that consumers who live in foreign countries will develop familiarity with the COO for any pre-purchasing decision, but will not be biased to the host country if they were to make a choice of ranking the country's products.

The findings showed that the perceptions of products made in advanced countries are better than those made in developing countries. Malaysian cars were perceived to have lower quality to those in the developed countries, since Malaysia was ranked in 8th place in terms of quality among ten countries. Therefore, it is noteworthy for PROTON and PERODUA, the two main car manufacturers in Malaysia to implement strategies to boost car performance in order to obtain trust and confidence of consumers toward Malaysian car quality.

Malaysian car manufacturers may encounter difficulties in capturing market share since Malaysian cars are perceived as lower quality car. Therefore, Malaysian car's manufacturers may have to think of technology transfer, collaboration with established and renowned car makers in developed countries and continuous improvement in their quality, price, services and value, which will be more appealing to the consumers (Ohmae, 1989). Ohmae (1989) strongly believed that consumers should not worry about where the product was made, all they have to worry about is the product's quality, price, design, and value, and how the product appeals to them as consumers.

Taking Japanese made cars, for example, Japan started off with cheaper and affordable cars. Western consumers once looked down on their cars at the beginning. However, today, Japanese cars have captured the world market as well as in numerous Western countries. Japanese made cars were selected as the first and second choice in terms of quality by international students in this research. Malaysian car producers can utilise the same strategies as Japan starting off gradually with affordable cars to gain the confidence of consumers in terms of quality. The introduction of the new model, PROTON PREVE by PROTON could be seen as the first step to show to the world Malaysia's competency and capability in producing quality and affordable cars.

There were a few limitations that have been identified in this study. Firstly, the respondents for this study covered only those from Universiti Utara Malaysia. Respondent from some countries, for instance, Cambodia, was represented by only one respondent. Therefore, the findings from this research could not be generalised to all universities in Malaysia.

Secondly, the ranking of countries only covered 10 countries and respondents were not asked to justify on why they ranked in that manner. In fact, a more elaborate and comprehensive scale should be used to obtain higher valuable data of this construct.

Thirdly, most respondents were students and did not own cars, hence, the ranking was just based on what they experienced or based on information provided by their friends or through readings. The study focused on perception

of product evaluation but not on actual pre-purchasing behaviour, which can be influenced by several other variables in reality. Thus, future research should be done on a greater scope covering all the public and private institutions of higher learning in Malaysia, and a better measurement scale could be utilised to gather information for statistical analysis.

The main objective of this paper was to explore the influence of COO on pre-purchasing of local product behaviour by international students at a local university in Malaysia. The analysis suggested that the COO is an important factor considered by the international students before the purchase of local products. A further analysis of the respondent ranking of Malaysian cars' quality found that cars made by developed countries were ranked much higher than cars made in developing countries, which is consistent with the theory of Country of Origin.

References

Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review*, *38*(3), 103.

Buzzell, R. (2004). The PIMS programme of strategy research-A retrospective appraisal. *Journal of Business Research, 57*, 478–483.

Cai, Y., Cude, B., & Swagler, R. (2004). Country-of-origin effects on consumers' willingness to buy foreign products: An experiment in consumer decision making. *Consumer Interests Annual, 50*, 98–105.

Darling, W., & Wood, H. (1990). The animosity of model of foreign product purchase. *Journal of Empirical Generalisations in Marketing Science, 6*, 1–14.

Gale, B. T., & Buzzell, R. D. (1989). Market perceived quality: Key strategic concept. *Planning Review, 12*(2), 6–10.

Ghazali, M., Othman, M. S., Yahya, A. Z., & Ibrahim, M. S. (2008). Products and country of origin effects: The Malaysian consumer's perception. *International Review of Business Research Papers, 4*(2), 91–102.

Han, C. M. (1990). Testing the role of country image in consumer choice behaviour. *European Journal of Marketing, 24*(6), 24–39.

Han, C. (1988). The role of consumer patriotism in the choice of domestic versus foreign products. *Journal of Advertising Research*, *28*(June/July), 25–32.

Khachatuarian, J. L., & Morganosky, M. A. (1990). Quality perceptions by country-of-origin. *International Journal of Retail and Distribution, 18*(5), 21–30.

Kinter, K. (1995). Struggling to win blacks. *Advertising Age, 66*(14), 20–21.

LaBarre, P. (1994). Quality's silent partner. *Industry Week, 18*(April), 47–48.

McCarthy, & Patrick, S. (2001). Market price and income elasticity of new vehicles demands. *The Review of Economics and Statistics, 78*(3), 543–547.

Morello, G. (1984). The made-in issue: A comparative research on the images of domestic and foreign products. *European Research, January*, *12*, 5–21.

Ohmae, K. (1989). Managing in borderless world. *Harvard Business Review*, *67*(3), 152–161.

Pappu, R., Quester, P. G., & Cooksey, R. W. (2007). Country image and consumer-based brand equity: Relationships and implications for international marketing. *Journal of International Business Studies, 38*, 726–745.

Papadopoulos, N. (1991). What product country images are and are not. In N. Papadopoulus, & L. A. Heslop, (Eds.), *Product-country images: Impact and role in international marketing* (pp. 3–38). New York: International Business Press.

Sekaran, U., & Bougie, R. (2003). *Research methods for business: A skill building approach*. United Kingdom: John Wiley and Sons.

Sedgwick, D. (2002). New England joins California as an import friendly market. *Automative News, 7*(10), 35.

Schooler, R. D. (1971). Bias phenomena attendant to the marketing of foreign goods in the US. *Journal of International Business Studies, 2*(1), 71–88.

Shimp, T., & Sharma, S. (1993). Consumer ethnocentrism: Construction and validation of the CETSCALE. *Journal of Marketing Research, 24*(3), 280–289.

Terpstra, V., & Sarathy, R. (2000). *International marketing*. Texas: The Dryden Press.

Thakor, M.V., & Kohli, C. S. (1996). Brand origin: Conceptualisation and review. *Journal of Consumer Marketing, 13*(3), 21–42

Werzel, J., & Hoffer, G. (1982). Consumer demand for automobiles. A disaggregated market approach. *Journal of Consumer Research, 9*(2), 195–199.

Wojcik, C. (2000). Alternative models of demand for automobiles. *Economics Letters, 68*(2), 113–118.

Van Gelder, S. (2003). *Global brand strategy: Unlocking brand potential across countries, cultures, and markets*. London: Kogan Page.